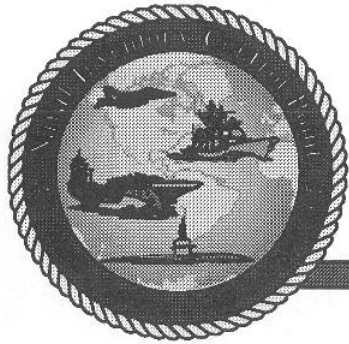


Logistics Information Superiority Experiment (ISX)

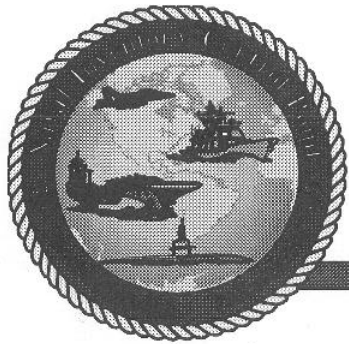
**A Proposal for Improving Warfighter Logistics Support
Through
Rapid Introduction and Integration of Advanced Technology**



Problem: DoD Depot Repair Process Takes Too Long, Costs Too Much, and Adapts Too Slowly to New Requirements

- Avg DOD depot repair cycle time (DRCT) = 83 days @ \$51M per day
- DRCT inventory value = \$4.4 Billion
- Improvement to date inhibited by:
 - ◆ Fragmented supply chain
 - ◆ Antiquated “stand-alone” legacy systems
 - ◆ Limited asset visibility
 - ◆ Inaccurate forecasts of future requirements
 - ◆ Lack of timely performance metrics
 - ◆ Cultural resistance to change

*NAVICP Log
ISX delayed
until FY99*



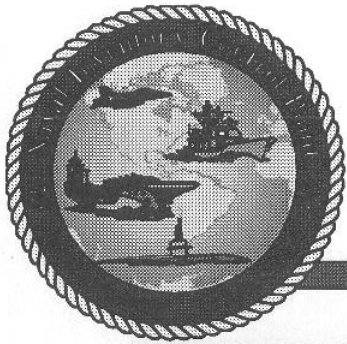
Logistics ISX Objectives

- Improve Response to Warfighter at Lower Cost
 - ◆ Advanced COTS/GOTS Information Technology
 - ◆ Integrated Supply Chain Management Techniques
- Proliferate Lessons Learned Throughout DOD

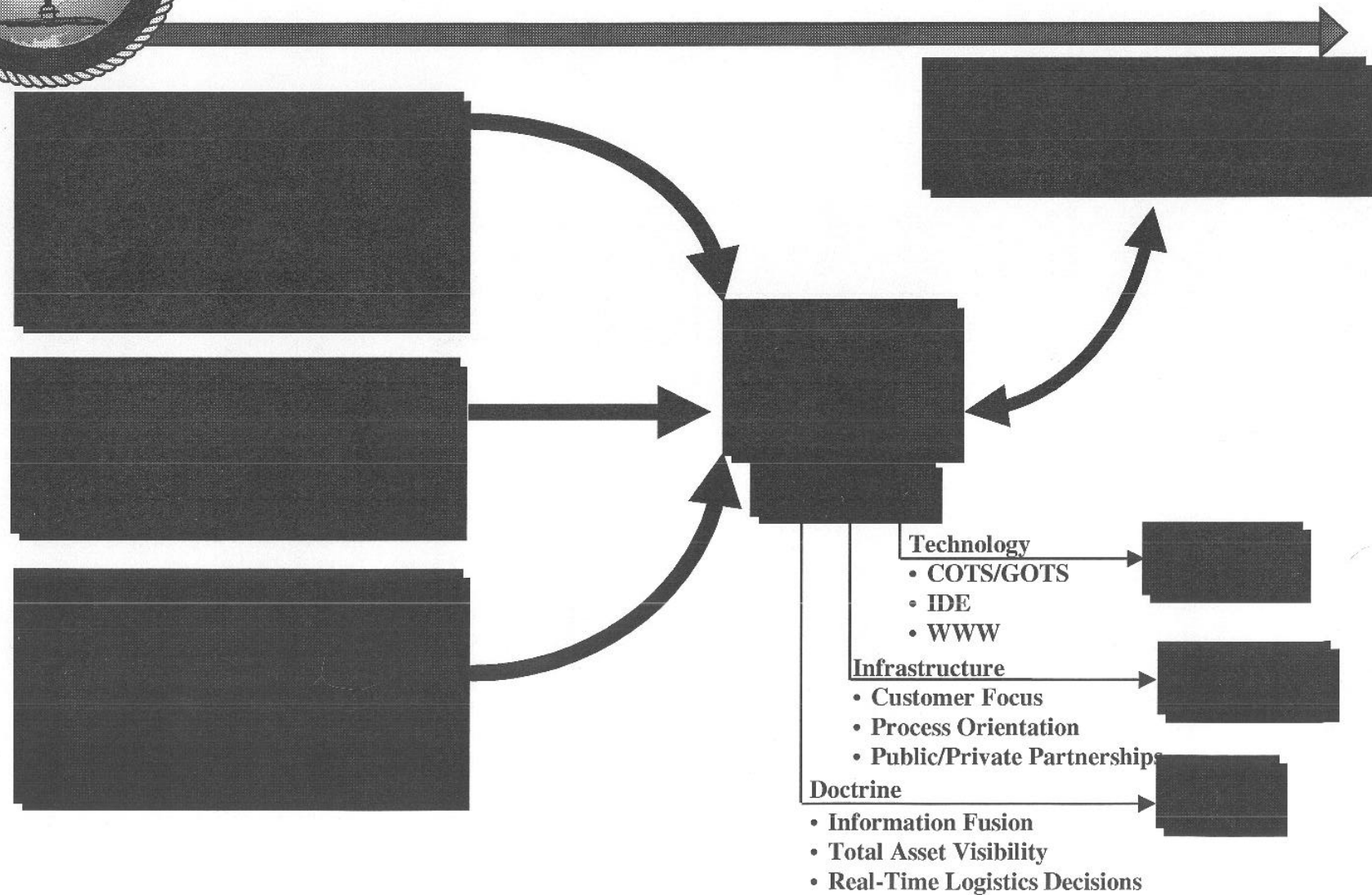


Linkage to Joint Vision 2010

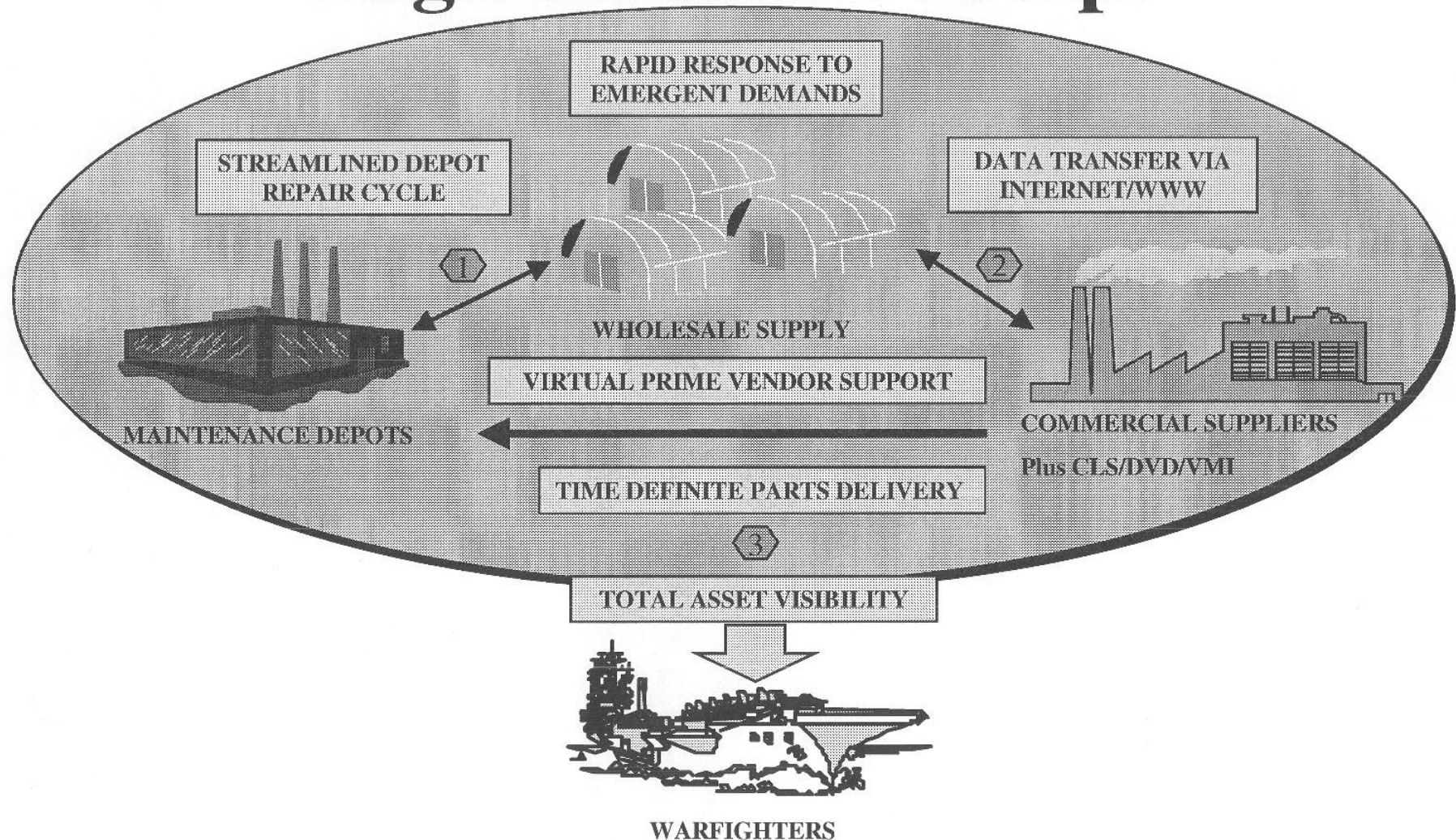
- **Focused Logistics is a key element of the JV2010 strategy for achieving Full Spectrum Dominance**
- Providing Focused Logistics involves meeting several critical challenges, such as:
 - ◆ **Information Fusion**
 - Near real-time command/control of logistics
 - Clear picture of overall support posture
 - ◆ **Joint Deployment/Rapid Distribution**
 - Joint/seamless materiel distribution system
 - Quick response to emerging requirements
 - ◆ **Agile Infrastructure**
 - Minimal logistics footprint in forward areas
 - Tailored combat support packages



The Total Picture



Logistics ISX Concept



Electronic Connectivity Via Information Technology Backplane



Information Network Interfaces

- **Supply-Maintenance Interfaces**

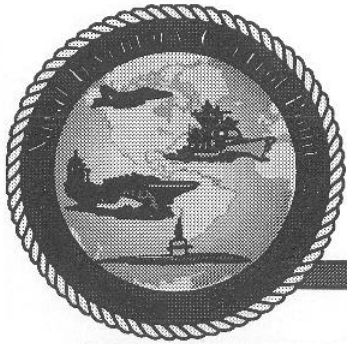
- ◆ Integration of COTS supply chain packages and recent GOTS developments with COTS MRP II to achieve seamless information exchange
- ◆ Shared data regarding repair requirements (priorities, due dates, & quantities) and depot production status

- **DoD-Vendor Interfaces**

- ◆ Data transfer via Internet between COTS MRP II/supply chain management systems and virtual prime vendors
- ◆ On-demand/just-in-time repair parts delivery to depots

- **Logistician-Warfighter Interfaces**

- ◆ Complete asset visibility via JTAV
- ◆ Real-time logistics decision support



Functional Characteristics

Repair Process Management

- COTS MRP II Functionality
- Customer-driven Inductions
- Increased Responsiveness
- Faster Turnaround Times

Repairable Asset Management

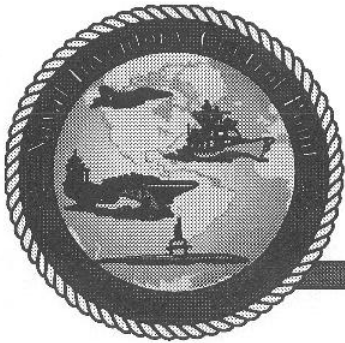
- Integrated Supply Chain
- Customer-driven Requirements
- Rapid Reprioritization
- Smaller Pipeline Inventories

Parts Support

- Virtual Prime Vendors
- Data Exchange via WWW
- Time Definite Deliveries
- Flexible On-demand Mfg

Asset Visibility

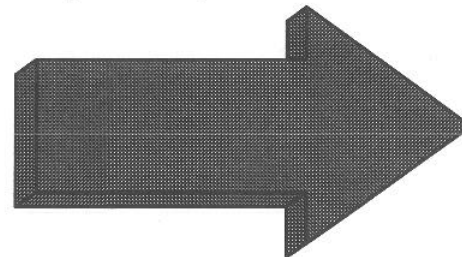
- Warfighter Focus
- JTAV Interface
- Info partnerships/data sharing
- Consumption
- Reliability



Proposed Approach

- Identify representative systems/components for prototype tests
- Determine system interfaces/protocols needed for successful integration of depot COTS MRP II software with applicable supply processes and systems
- Utilize COTS/GOTS applications to facilitate integrated supply chain management functionality
- Establish/simulate real-time electronic connectivity for:
 - ◆ Virtual prime vendor support
 - ◆ CLS/DVD/VMI
 - ◆ JTAV interface
- Develop data base that will allow sensitivity analyses and quantitative verification of test results

Success will equal



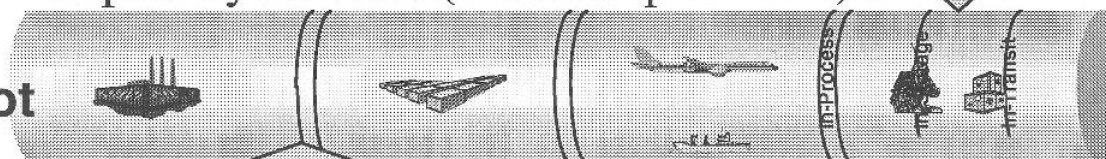
JCS View

Use COTS tools to fuse logistics information and ascertain whether integrated supply management policies can:

- reduce repair cycle time*
- improve Warfighter Readiness*
- reduce logistics support costs*

Depot Repair Cycle Time (Maint/Repair Parts)

Factory/Depot



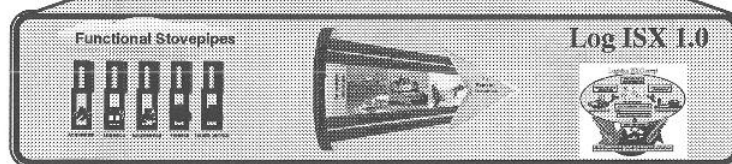
Foxhole, flightline, cockpit or deckplate

In-Process

In-Storage

In-Transit

In-Theater



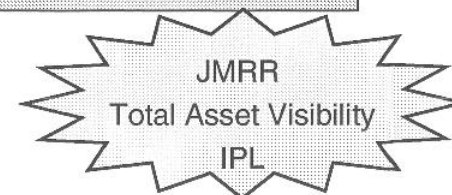
*Readiness
Enhancement thru
Logistics Response
Time Reduction*

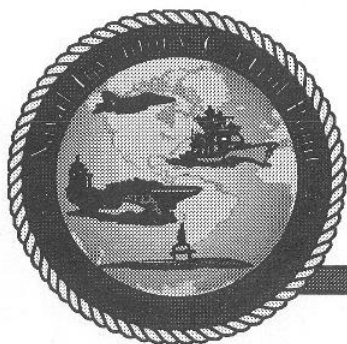
- | | | |
|---------------------|-----------------------|---------------------|
| •Internally Focused | •Speed of Information | •Warfighter Focused |
| •Stovepiped | •Network-centric | •Integrated |
| •Unresponsive | •Simulation-based | •Interoperable |



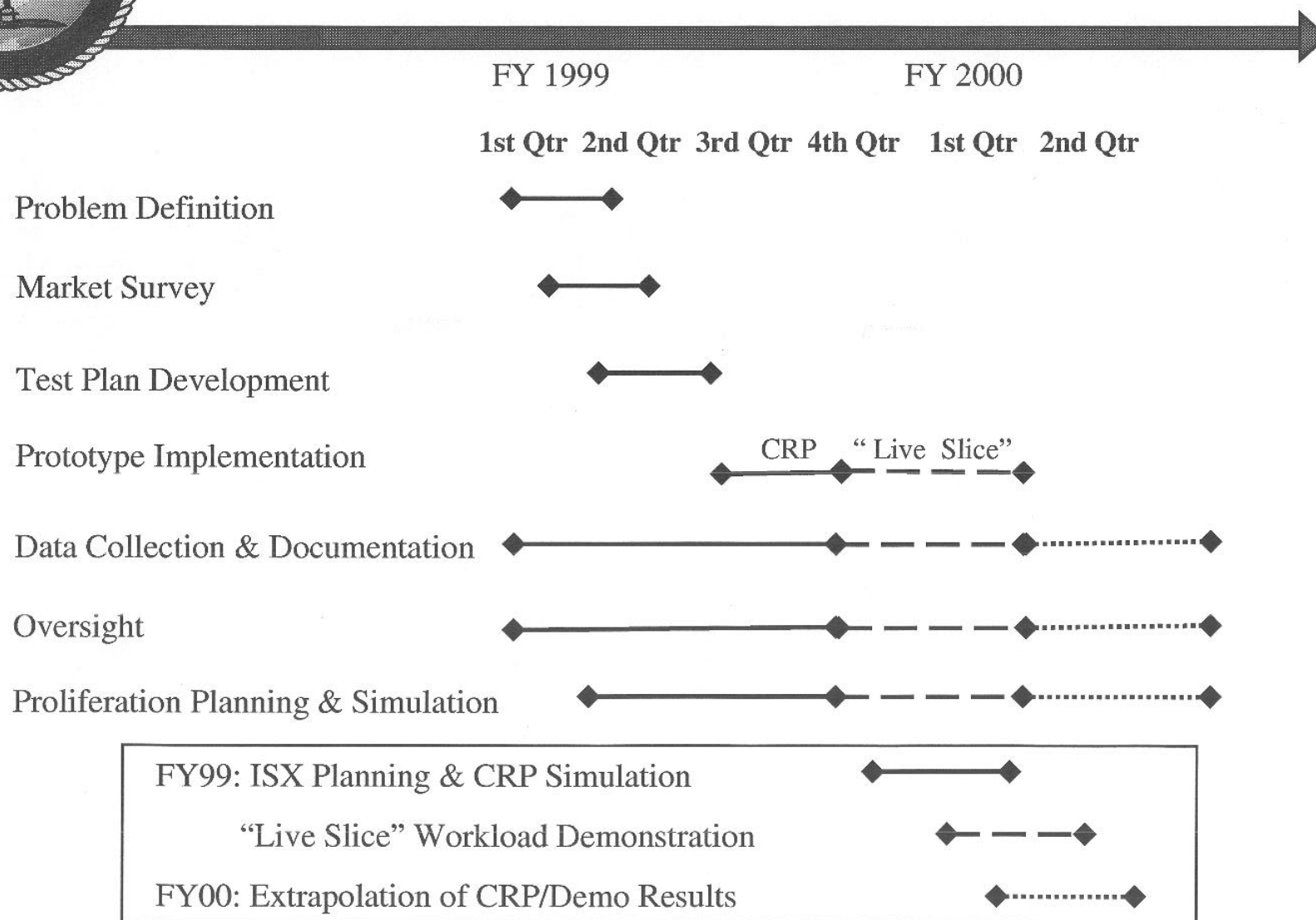
Log ISX 2.0

CY 2000





Milestones



Log ISX Value to the Warfighter

- Shorter repair cycle time enhances combat readiness
- Assists in total asset visibility, tracking, and control
- Enables rapid and precise maintenance and supply support
- Supports GCCS through COP andGCSS

